

REMARKS

In the Office Action dated February 12, 2004, pending Claims 1-3 and 5-10 were rejected and the rejection made final. The Office is respectfully requested to reconsider the rejections in view of the following remarks. It should be noted that June 12, 2004, fell on a Saturday, which ensures that this paper is timely filed as of today, Monday, June 14, 2004.

Applicant and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. On May 21, 2004, Applicant and Applicant's counsel conducted a telephone interview with the Examiner during which the claims and the Bereke et al. and Mohle references were discussed. While no agreement was reached with respect to the claims, Applicant discussed the differences between the Bereke et al. and Mohle references and the Examiner agreed to reconsider the rejection upon filing of a response.

Claims 1-3 and 5-10 were pending in the instant application at the time of the outstanding Office Action. These claims stand rejected under 35 USC 103(a) as being unpatentable over Bereke et al. in view of Mohle. In view of the remarks presented below, it is respectfully submitted that Claims 1-3 and 5-10 fully distinguish over the applied art. Reconsideration and withdrawal of the present rejection is hereby respectfully requested.

The claimed invention provides a method of processing a fluid, which comprises, *inter alia*, atomizing the fluid in a supercritical fluid medium to dissolve at least one

component in the fluid such that the dissolved components may be separated from the supercritical fluid. (Claim 1) Accordingly, a fluid containing contaminants is atomized into a supercritical fluid medium. See Page 11, lines 4-7 ("The supercritical fluid enters from one end of the reactor. The jet spray of the chemical fluid is done perpendicular to the flow of the supercritical fluid. High-pressure jet spray micro-orifices (20) atomize the fluid to micro droplets inside the supercritical fluid reactor (13) resulting in a mixing of the two fluids ...") Mixing a fluid containing contaminants into a supercritical fluid is not suggested by the art of record.

Beneke et al. as best understood appears to be directed to a batch process for extraction of coal tar pitch using supercritical gas in conjunction with high ration subcritical entrainer. As discussed in the prior Amendment, coal tar pitch is a solid or semi-solid material at ambient temperatures. See [http://www.iupac.org/goldbook/C01121.pdf (excerpt from International Union of Pure and Applied Chemistry Goldbook (Second Edition 1997)) (copy attached to prior Amendment). The Office acknowledges that "Bereke does not specifically disclose that the fluid is atomized in a supercritical fluid medium ..." (*Office Action* at 3) Indeed, the solid and semi-solid feed material used in Beneke et al. is not suitable for atomization into a supercritical fluid medium.

Mohle as best understood appears to be directed to separating debris embedded in solid pitch by exposing the pitch to a high pressure spray. As the Office states, "Mohle discloses an apparatus system in which a solvent is passed out of nozzles to spray into a pitch ..." (*Id.*) Again, the pitch material used in Mohle is not suitable for atomization

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into a supercritical fluid medium. Mohle thus does not provide a teaching or suggestion of the instantly claimed invention, e.g., mixing a fluid containing contaminants into a supercritical fluid.

The combination of Beneke et al. and Mohle also fails to teach or suggest the instantly claimed invention and following the teachings of Beneke et al. and Mohle would not result in the instantly claimed invention. For the reasons set forth above, neither Beneke et al. nor Mohle, individually or in combination, teach or suggest mixing a fluid containing contaminants into a supercritical fluid.

In view of the foregoing, it is respectfully submitted that Claim 1 fully distinguishes over the applied art and is thus in condition for allowance. By virtue of dependence from what is believed to be an allowable independent Claim 1, it is respectfully submitted that Claims 2-3 and 5-10 are also presently allowable.

In summary, it is respectfully submitted that the instant application, including Claims 1-3 and 5-10, is in condition for allowance. Notice to the effect is hereby earnestly solicited.

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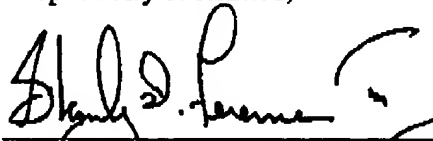
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Applicant's attorney would welcome further discussion with the Office in the event there are any further issues in this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stanley D. Ference III", is written over a horizontal line.

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